FROM M. FREEMAN
WORLD TRADE CENTER

TO MR. J. L. SORRELL
WORLD TRADE CENTER

December 10, 1969

RE: WORLD TRADE CENTER 400.00
FIREPROOFING - INSULATION

Notes on Conference held in Tishman's meeting room, 1:00PM, December 10, 1969.

ATTENDING:
M. Gerstman and A. Levine	-	TRCC
M. Freeman	-	Alcoa
A. Bessemer	-	Cafco
F. Tartamello	-	Mario & DiBono

Milt Gerstman requested this impromptu meeting during a regular job meeting. He took exception and expressed his concern for the following two points:

1. Milt noted that his staff pointed out to him the change on the interior fireproofing from Cafco to vermiculite on the interior faces of the upper and lower spandrels at typical floors. Milt noted that the architects contract design drawings (which he noted were to have been based on Cupples' design) indicated the spandrel areas as being fireproofed with Cafco and indicated only a vertical column surface as getting lath, vermiculite and finished white coat plaster. Milt stressed several times that the change from Cafco to vermiculite should have been pointed out by letter, although it is indicated on the Cupples revised shop drawings. Milt felt that specific approval should have been obtained for these substitutions to protect Alcoa's interest in case of further problems. Milt Gerstman also questioned the direct spray application of the vermiculite to the painted structural steel <u>without</u> the use of a bonding agent.

2. Milt Gerstman also questioned what he termed was a persistent "rumor" that the field application of Cafco could not be continued properly in below freezing weather. He noted that Lou DiBono had told Jim Endler, during negotiations and prior to the selection of Cafco as the fireproofing material, that Cafco could be applied effectively in outside temperatures down to 20°F. Milt said that on that basis, Tishman had

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anticipated the possibility of losing "a few days" through the winter. Al Bessemer of Cafco pointed out that his technicians were on the jobsite yesterday, studying winter application problems of the Cafco on the exterior box columns of Tower A. F. Tartamello mentioned that the problem was being studied and that he and Al Bessemer were to have a conference later this afternoon with Lou DiBono to attempt to arrive at an operational solution to these winter application problems. Al Bessemer noted that on cold mornings he thought that condensing moisture, which froze on the surface of the box columns, was preventing proper bonding of the Cafco spray to the steel (Al later mentioned to me and Frank that Cafco had been applied on conventional steel sections with outside temperatures as low as 7°F). Milt Gerstman noted that the Cafco field demonstrations on the World Trade Center Site, which was done early in 1968, was done on a snowy, cold day. Al Bessemer replied that the actual air temperatures during this Cafco demonstration was 38°F, while during the following night the temperature had dropped down to 24°.

M. FREEMAN

MF:dl

cc: A. J. Faranda, New York

P.S. I am waiting to hear from Mario & DiBono and Cafco on the possibilities of using an anti-freeze in the water mixture for the Cafco and their comments on this project.

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